



Montana Department of  
**ENVIRONMENTAL QUALITY**

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September 18, 2012

Mr. Clarence Davis  
HK Contractors, Inc.  
P.O. Box 51450  
Idaho Falls, Idaho 83405

Dear Mr. Davis

Montana Air Quality Permit #3091-01 is deemed final as of September 18, 2012, by the Department of Environmental Quality (Department). This permit is for a crushing and screening facility. All conditions of the Department's Decision remain the same. Enclosed is a copy of your permit with the final date indicated.

For the Department,

Charles Homer  
Manager, Air Permitting, Compliance and Registration  
Air Resources Management Bureau  
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CH:CPH  
Enclosure

Montana Department of Environmental Quality  
Permitting and Compliance Division

Montana Air Quality Permit #3091-01

HK Contractors, Inc.  
P.O. Box 51450  
Idaho Falls, Idaho 83405

September 18, 2012



## MONTANA AIR QUALITY PERMIT

Issued To: HK Contractors, Inc.  
P.O. Box 51450  
Idaho Falls, Idaho 83405

Montana Air Quality Permit #3091-01  
Application Complete: July 17, 2012  
Preliminary Decision: July 31, 2012  
Department Decision Issued: August 31, 2012  
Permit Final: September 18, 2012  
AFS #: 777-3091

A Montana Air Quality Permit (MAQP), with conditions, is hereby granted to HK Contractors, Inc. (HK) pursuant to Sections 75-2-204 and 211 of the Montana Code Annotated (MCA), as amended, and Administrative Rules of Montana (ARM) 17.8.740, *et seq.*, as amended, for the following:

### SECTION I: Permitted Facilities

#### A. Plant Location

MAQP #3091-01 applies while operating at any location in Montana, except those areas having a Department of Environmental Quality (Department) approved permitting program, areas considered tribal lands, or areas in or within 10 kilometers (km) of certain particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>) nonattainment areas. *A Missoula County air quality permit will be required for locations within Missoula County, Montana.* An addendum will be required for locations in or within 10 km of certain PM<sub>10</sub> nonattainment areas. A summary of equipment used in developing the emission inventory is contained in Section I.A. of the Permit Analysis to MAQP # 3091-01.

#### B. Current Permit Action

On June 15, 2012, the Department received a request from HK to modify MAQP #3091-00 by preparing a revised permit with de minimis friendly limitations. The primary reason for preparing the permit modification is to provide flexibility within the permit for using different sized diesel engines. Additional information was also received on July 17, 2012 related to the horsepower ratings of the permitted engines. The permit also updated rule references and revised Department language.

### SECTION II: Conditions and Limitations

#### A. Emission Limitations

1. All visible emissions from any Standards of Performance for New Stationary Sources (NSPS)-affected crusher shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
  - For crushers that commence construction, modification, or reconstruction on or after April 22, 2008: 12% opacity
  - For crushers that commence construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 15% opacity

2. All visible emissions from any other NSPS-affected equipment, other than a crusher (such as screens or conveyor transfers), shall not exhibit an opacity in excess of the following averaged over 6 consecutive minutes (ARM 17.8.340 and 40 CFR 60, Subpart OOO).
  - For equipment that commences construction, modification, or reconstruction on or after April 22, 2008: 7% opacity
  - For equipment that commences construction, modification, or reconstruction after August 31, 1983, but before April 22, 2008: 10% opacity
3. All visible emissions from any non-NSPS affected equipment shall not exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8. 304).
4. Water and spray bars shall be available on site at all times and operated, as necessary, to maintain compliance with the opacity limitations in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752).
5. HK shall not cause or authorize to be discharged into the atmosphere from any street, road, or parking lot any visible fugitive emissions that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes (ARM 17.8.308 and ARM 17.8.752).
6. HK shall treat all unpaved portions of the haul roads, access roads, parking lots, or the general plant area with water and/or chemical dust suppressant, as necessary, to maintain compliance with the reasonable precautions limitation in Section II.A.5 (ARM 17.8.749).
7. HK shall not operate more than four crushers at any given time and the combined maximum rated design capacity of the crushers shall not exceed 1600 tons per hour (TPH) (ARM 17.8.749).
8. HK shall not operate more than five screens at any given time and the total maximum rated design capacity of the screens shall not exceed 1600 TPH (ARM 17.8.749). This does not prevent operation of any integral screens located on permitted crushers at the same time as the other independent screens.
9. HK shall not operate more than three diesel-fired engines driving electrical generators (or directly driving crushers, screens, etc.) at any given time and the combined maximum rated design capacity shall not exceed 2810 horsepower (hp) as determined by the rated size of the engines powering the generators (ARM 17.8.749).
10. The total hours of each of the three diesel-fired engines that may be used under this permit shall be limited to 2,000 hours of operation during any rolling 12-month time period (ARM 17.8.749).
11. If the permitted equipment is used in conjunction with any other equipment owned or operated by HK, at the same site, production shall be limited to correspond with an emission level that does not exceed 250 tons during any rolling 12-month period. Any calculations used to establish production levels shall be approved by the Department (ARM 17.8.749).

12. HK shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart III, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* and 40 CFR 63, Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, for any applicable diesel engine (ARM 17.8.340; 40 CFR 60, Subpart III; ARM 17.8.342 and 40 CFR 63, Subpart ZZZZ).
13. HK shall comply with all applicable standards and limitations, and the reporting, recordkeeping, testing, and notification requirements contained in 40 CFR 60, Subpart OOO, *Standards of Performance for Nonmetallic Mineral Processing Plants* (ARM 17.8.340 and 40 CFR 60, Subpart OOO).

B. Testing Requirements

1. Within 60 days after achieving maximum production, but no later than 180 days after initial start-up, an Environmental Protection Agency (EPA) Method 9 opacity test and/or other methods and procedures, as specified in 40 CFR 60.675 must be performed on all NSPS affected equipment to demonstrate compliance with the emission limitations contained in Sections II.A.1 and II.A.2 (ARM 17.8.340 and 40 CFR 60, Subpart A and Subpart OOO).
2. All compliance source tests shall conform to the requirements of the Montana Source Test Protocol and Procedures Manual (ARM 17.8.106).
3. The Department may require further testing (ARM 17.8.105).

C. Operational Reporting Requirements

1. If this crushing/screening plant is moved to another location, an Intent to Transfer Form must be sent to the Department and a Public Notice Form for Change of Location must be published in a newspaper of general circulation in the area to which the transfer is to be made, at least 15 days prior to the move. The proof of publication (affidavit) of the Public Notice Form for Change of Location must be submitted to the Department prior to the move. These forms are available from the Department (ARM 17.8.749 and ARM 17.8.765).
2. HK shall supply the Department with annual production information for all emission points, as required by the Department in the annual emission inventory request. The request will include, but not be limited to, all sources of emissions identified in the emission inventory contained in the permit analysis.

Production information shall be gathered on a calendar-year basis and submitted to the Department by the date required in the emission inventory request. Information shall be in the units required by the Department. This information may be used for calculating operating fees, based on actual emissions from the facility, and/or to verify compliance with permit limitations (ARM 17.8.505).

3. HK shall notify the Department of any construction or improvement project conducted, pursuant to ARM 17.8.745, that would include ***the addition of a new emissions unit***, change in control equipment, stack height, stack diameter, stack flow, stack gas temperature, source location, or fuel specifications, or would result in an increase in source capacity above its permitted operation. The notice must

be submitted to the Department, in writing, 10 days prior to start-up or use of the proposed de minimis change, or as soon as reasonably practicable in the event of an unanticipated circumstance causing the de minimis change, and must include the information requested in ARM 17.8.745(1)(d) (ARM 17.8.745).

4. HK shall maintain on-site records showing daily hours of operation and daily production rates for the last 12 months. The records compiled in accordance with this permit shall be maintained by HK as a permanent business record for at least 5 years following the date of the measurement, must be available for inspection by the Department, and must be submitted to the Department upon request (ARM 17.8.749).
5. HK shall annually certify that its emissions are less than those would require the facility to obtain an air quality operating permit as required by ARM 17.8.1204(3)(b). The annual certification shall be submitted along with the annual emissions inventory information (ARM 17.8.749 and ARM 17.8.1204).
6. HK shall document, by month, the hours of operation of the diesel engine/generators. By the 25<sup>th</sup> of each month, HK shall calculate the hours of operation each diesel engine/generator for the previous month. The monthly information will be used to demonstrate compliance with the rolling 12-month limitation in Section II.A.10. The information for each of the previous months shall be submitted along with the annual emission inventory (ARM 17.8.749).

### SECTION III: General Conditions

- A. Inspection – HK shall allow the Department’s representatives access to the source at all reasonable times for the purpose of making inspections or surveys, collecting samples, obtaining data, auditing any monitoring equipment (Continuous Emission Monitoring Systems (CEMS) or Continuous Emission Rate Monitoring Systems (CERMS)), or observing any monitoring or testing, and otherwise conducting all necessary functions related to this permit.
- B. Waiver - The permit and all the terms, conditions, and matters stated herein shall be deemed accepted if HK fails to appeal as indicated below.
- C. Compliance with Statutes and Regulations - Nothing in this permit shall be construed as relieving HK of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided for in ARM 17.8.740, *et seq.* (ARM 17.8.756).
- D. Enforcement - Violations of limitations, conditions and requirements contained herein may constitute grounds for permit revocation, penalties or other enforcement as specified in Section 75-2-401 *et seq.*, MCA.
- E. Appeals – Any person or persons jointly or severally adversely affected by the Department’s decision may request, within 15 days after the Department renders its decision, upon affidavit setting forth the grounds therefore, a hearing before the Board of Environmental Review (Board). A hearing shall be held under the provisions of the Montana Administrative Procedures Act. The filing of a request for a hearing does not stay the Department’s decision, unless the Board issues a stay upon receipt of a petition and a finding that a stay is appropriate under Section 75-2-211(11)(b), MCA. The issuance of a stay on a permit by the Board postpones the effective date of the

Department's decision until conclusion of the hearing and issuance of a final decision by the Board. If a stay is not issued by the Board, the Department's decision on the application is final 16 days after the Department's decision is made.

- F. Permit Inspection - As required by ARM 17.8.755, Inspection of Permit, a copy of the air quality permit shall be made available for inspection by Department personnel at the location of the permitted source.
- G. Permit Fee - Pursuant to Section 75-2-220, MCA, failure to pay of the annual operation fee by HK may be grounds for revocation of this permit, as required by that section and rules adopted thereunder by the Board.
- H. Duration of Permit - Construction or installation must begin or contractual obligations entered into that would constitute substantial loss within 3 years of permit issuance and proceed with due diligence until the project is complete or the permit shall expire (ARM 17.8.762).
- I. The Department may modify the conditions of this permit based on local conditions of any future site. These factors may include, but are not limited to, local terrain, meteorological conditions, proximity to residences, etc.
- J. HK shall comply with the conditions contained in this permit while operating in any location in Montana, except within those areas that have a Department-approved permitting program or areas considered tribal lands.

MONTANA AIR QUALITY PERMIT (MAQP) ANALYSIS  
HK Contractors, Inc.  
MAQP #3091-01

I. Introduction/Process Description

A. Permitted Equipment

HK Contractors, Inc., (HK) operates up to four crushers with integral screens as well as five independent screens and associated conveyors and up to three diesel-fired engines with a combined total horsepower (hp) of 2810. The total crushing capacity is limited to 1600 tons/hr (TPH) and total screening capacity is limited to 1600 TPH. A total of four independent crushers and five independent screens may be operated simultaneously.

1977 Cedar Rapids Jaw Crusher  
2000 JCI K400 Kodiak Cone Crusher  
2004 JCI 300H Kodiak Cone Crusher  
2004 Barmac 9000 Crusher  
2004 JCI Screen  
1997 ELJAY Screen  
1997 Cedar Rapids Screen  
2004 Pioneer Screen  
1988 Pioneer Screen  
1991 1600 kW Caterpillar Diesel Generator  
2012 425 kW Caterpillar Diesel Generator  
2004 70 kW Whisper Watt Generator

B. Source Description

HK proposes to use this crushing/screening plant and associated equipment to crush, screen and sort sand and gravel materials for use in various construction operations. For a typical operational setup, materials are loaded into the primary impact crusher using a wheeled loader, and then fed to the secondary crushers. Material is separated by screening and finally sent to stockpiles for sale and use in construction operations. Conveyors transport the gravel between the various components.

C. Home Pit Location

HK does not have a home pit in Montana and at the date of this permit update was not operating at any location in Montana but submitted an Intent to Transfer request from their previously designated Montana location to an existing pit just north of Gardiner, MT.

D. Permit History

On March 27 2000, HK was issued **MAQP #3091-00** to operate a portable crushing and screening facility. The original permit application indicates a total of four crushers and five screens were originally permitted along with a single diesel generator and associated equipment.

E. Current Permit Action

On June 15, 2012, the Department received a request from HK to modify MAQP #3091-00 by preparing a revised permit with de minimis friendly limitations. Additional information was also received on July 17, 2012 related to the horsepower ratings of permitted engines. The primary reason for preparing the modification is to provide flexibility within the permit for diesel generator operation and update the emission inventories to reflect the current equipment in operation. The permit will also update rule references and update the permit to more recent language. This modification request is the result of a Full Compliance Evaluation (FCE) indicating that a smaller generator than was specified in the permit was being operated suggesting the need to develop a permit written in a de minimis manner.

Under the current permit action, a total of four crushers and five screens will be allowed with a combined total design capacity for each category of 1600 TPH. Up to three diesel-fired engines are also included with a maximum total hp rating of 2810. **MAQP #3091-01** replaces MAQP #3091-00.

F. Additional Information

Additional information, such as applicable rules and regulations, Best Available Control Technology (BACT)/Reasonably Available Control Technology (RACT) determinations, air quality impacts, and environmental assessments, is included in the analysis associated with each change to the permit.

II. Applicable Rules and Regulations

The following are partial explanations of some applicable rules and regulations that apply to the facility. The complete rules are stated in the Administrative Rules of Montana (ARM) and are available, upon request, from the Department. Upon request, the Department will provide references for locations of complete copies of all applicable rules and regulations or copies where appropriate.

A. ARM 17.8, Subchapter 1 - General Provisions, including, but not limited to:

1. ARM 17.8.101 Definitions. This rule includes a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.105 Testing Requirements. Any person or persons responsible for the emission of any air contaminant into the outdoor atmosphere shall, upon written request of the Department, provide the facilities and necessary equipment (including instruments and sensing devices) and shall conduct tests, emission or ambient, for such periods of time as may be necessary using methods approved by the Department.
3. ARM 17.8.106 Source Testing Protocol. The requirements of this rule apply to any emission source testing conducted by the Department, any source, or other entity as required by any rule in this chapter, or any permit or order issued pursuant to this chapter, or the provisions of the Clean Air Act of Montana, 75-2-101, *et seq.*, Montana Code Annotated (MCA).

HK shall comply with the requirements contained in the Montana Source Test Protocol and Procedures Manual, including, but not limited to, using the proper test methods and supplying the required reports. A copy of the Montana Source Test Protocol and Procedures Manual is available from the Department upon request.

4. ARM 17.8.110 Malfunctions. (2) The Department must be notified promptly by telephone whenever a malfunction occurs that can be expected to create emissions in excess of any applicable emission limitation or to continue for a period greater than 4 hours.
5. ARM 17.8.111 Circumvention. (1) No person shall cause or permit the installation or use of any device or any means that, without resulting in reduction of the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant that would otherwise violate an air pollution control regulation. (2) No equipment that may produce emissions shall be operated or maintained in such a manner as to create a public nuisance.

B. ARM 17.8, Subchapter 2 - Ambient Air Quality, including, but not limited to:

1. ARM 17.8.204 Ambient Air Quality Monitoring
2. ARM 17.8.210 Ambient Air Quality Standard for Sulfur Dioxide
3. ARM 17.8.211 Ambient Air Quality Standard for Nitrogen Dioxide
4. ARM 17.8.212 Ambient Air Quality Standard for Carbon Monoxide
5. ARM 17.8.213 Ambient Air Quality Standard for Ozone
6. ARM 17.8.214 Ambient Air Quality Standard for Hydrogen Sulfide
7. ARM 17.8.220 Ambient Air Quality Standard for Settled Particulate Matter
8. ARM 17.8.221 Ambient Air Quality Standard for Visibility
9. ARM 17.8.223 Ambient Air Quality Standard for PM<sub>10</sub>

HK must maintain compliance with the applicable ambient air quality standards.

C. ARM 17.8, Subchapter 3 - Emission Standards, including, but not limited to:

1. ARM 17.8.304 Visible Air Contaminants. This rule requires that no person may cause or authorize emissions to be discharged into the outdoor atmosphere from any source installed after November 23, 1968, that exhibit an opacity of 20% or greater averaged over 6 consecutive minutes.
2. ARM 17.8.308 Particulate Matter, Airborne. (1) This rule requires an opacity limitation of less than 20% for all fugitive emission sources and that reasonable precautions be taken to control emissions of airborne particulate matter. (2) Under this rule, HK shall not cause or authorize the use of any street, road, or parking lot without taking reasonable precautions to control emissions of airborne particulate matter.
3. ARM 17.8.309 Particulate Matter, Fuel Burning Equipment. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter caused by the combustion of fuel in excess of the amount determined by this section.
4. ARM 17.8.310 Particulate Matter, Industrial Processes. This rule requires that no person shall cause or authorize to be discharged into the atmosphere particulate matter in excess of the amount set forth in this section.

5. ARM 17.8.322 Sulfur Oxide Emissions--Sulfur in Fuel. This rule requires that no person shall burn liquid, solid, or gaseous fuel in excess of the amount set forth in this section.
6. ARM 17.8.324 Hydrocarbon Emissions--Petroleum Products. (3) No person shall load or permit the loading of gasoline into any stationary tank with a capacity of 250 gallons or more from any tank truck or trailer, except through a permanent submerged fill pipe, unless such tank truck or trailer is equipped with a vapor loss control device as described in (1) of this rule.
7. ARM 17.8.340 Standards of Performance for New Stationary Sources. This rule incorporates, by reference, 40 CFR Part 60, Standards of Performance for New Stationary Sources (NSPS). HK is considered an NSPS affected facility under 40 CFR Part 60 and is subject to the requirements of the following subparts.
  - a. 40 CFR 60, Subpart A. – General Provisions apply to all equipment of facilities subject to an NSPS Subpart as listed below.
  - b. 40 CFR 60, Subpart OOO – Standards of Performance for Nonmetallic Mineral Processing Plants. In order for a crushing plant to be subject to this subpart, the facility must meet the definition of an affected facility and, the affected equipment must have been constructed, reconstructed, or modified after August 31, 1983. Based on the information submitted by HK, the portable crushing equipment to be used under MAQP #3091-01 is subject to this requirement because it meets the definition of an affected facility and has been constructed or modified after August 31, 1983.
  - c. 40 CFR 60, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. Owners and operators of stationary compression ignition internal combustion engines (CI ICE) that commence construction after July 11, 2005, where the stationary CI ICE are manufactured after April 1, 2006, and are not fire pump engines, are subject to this subpart. In order to keep the permit de minimis-friendly, this permit authorizes the use of three diesel fired engines to drive electrical generators and the combined maximum rated design capacity shall not exceed 2810 hp. Based on the information submitted to the Department, one or more of the diesel engines to be used under MAQP #3091-01 may be subject to this subpart. Engines that are added in the future may also be subject to this subpart.
8. ARM 17.8.342 Emission Standards for Hazardous Air Pollutants for Source Categories. The source, as defined and applied in 40 CFR Part 63, shall comply with the requirements of 40 CFR Part 63, as listed below:
  - a. 40 CFR 63, Subpart A – General Provisions apply to all equipment of facilities subject to a NESHAP Subpart as listed below:
  - b. 40 CFR 63, Subpart ZZZZ – NESHAPs for Stationary Reciprocating Internal Combustion Engines (RICE). An owner or operator of a stationary reciprocating internal combustion engine (RICE) at a major or area source of HAP emissions is subject to this rule except if the stationary RICE is being tested at a stationary RICE test cell/stand. An area source of HAP emissions is a source that is not a major source. A RICE is considered

stationary if it remains or will remain at the permitted location for more than 12 months, or a shorter period of time for an engine located at a seasonal source. A seasonal source remains at a single location on a permanent basis (at least 2 years) and operates 3 months or more each year. Based on the information submitted by HK, the RICE equipment to be used under this permit may be subject to this subpart because they operate at an area source of HAP emissions and the engines may remain at the same location for more than 12 consecutive months.

D. ARM 17.8, Subchapter 5 - Air Quality Permit Application, Operation and Open Burning Fees, including, but not limited to:

1. ARM 17.8.504 Air Quality Permit Application Fees. This rule requires that an applicant submit an air quality permit application fee concurrent with the submittal of an air quality permit application. A permit application is incomplete until the proper application fee is paid to the Department. HK submitted the appropriate application fee for the current permit action.
2. ARM 17.8.505 Air Quality Operation Fees. An annual air quality operation fee must, as a condition of continued operation, be submitted to the Department by each source of air contaminants holding an air quality permit, excluding an open burning permit, issued by the Department; the air quality operation fee is based on the actual or estimated actual amount of air pollutants emitted during the previous calendar year.

An air quality operation fee is separate and distinct from an air quality permit application fee. The annual assessment and collection of the air quality operation fee, described above, shall take place on a calendar-year basis. The Department may insert into any final permit issued after the effective date of these rules, such conditions as may be necessary to require the payment of an air quality operation fee on a calendar-year basis, including provisions that pro-rate the required fee amount.

E. ARM 17.8, Subchapter 7 - Permit, Construction, and Operation of Air Contaminant Sources, including, but not limited to:

1. ARM 17.8.740 Definitions. This rule is a list of applicable definitions used in this chapter, unless indicated otherwise in a specific subchapter.
2. ARM 17.8.743 Montana Air Quality Permits--When Required. This rule requires a person to obtain an air quality permit or permit modification to construct, modify or use any asphalt plant, crusher or screen that has the potential to emit (PTE) greater than 15 tons per year of any pollutant. HK has a PTE greater than 15 tons per year of total particulate matter (PM), particulate matter with an aerodynamic diameter of 10 microns or less (PM<sub>10</sub>), Carbon Monoxide (CO), and oxides of nitrogen (NO<sub>x</sub>); therefore, an MAQP is required.
3. ARM 17.8.744 Montana Air Quality Permits--General Exclusions. This rule identifies the activities that are not subject to the Montana Air Quality Permit Program.
4. ARM 17.8.745 Montana Air Quality Permits--Exclusion for De Minimis Changes. This rule identifies the de minimis changes at permitted facilities that do not require a permit under the Montana Air Quality Permit Program.

5. ARM 17.8.748 New or Modified Emitting Units--Permit Application Requirements. (1) This rule requires that a permit application be submitted prior to installation, modification, or use of a source. HK submitted the required permit application for the current permit action. (7) This rule requires that the applicant notify the public by means of legal publication in a newspaper of general circulation in the area affected by the application for a permit. HK submitted an affidavit of publication of public notice for July 19<sup>th</sup>, 2012 issue of the Livingston Enterprise, a newspaper of general circulation in the Town of Livingston in Park County, as proof of compliance with the public notice requirements.
6. ARM 17.8.749 Conditions for Issuance or Denial of Permit. This rule requires that the permits issued by the Department must authorize the construction and operation of the facility or emitting unit subject to the conditions in the permit and the requirements of this subchapter. This rule also requires that the permit must contain any conditions necessary to assure compliance with the Federal Clean Air Act (FCAA), the Clean Air Act of Montana, and rules adopted under those acts.
7. ARM 17.8.752 Emission Control Requirements. This rule requires a source to install the maximum air pollution control capability that is technically practicable and economically feasible, except that BACT shall be utilized. The required BACT analysis is included in Section III of this Permit Analysis.
8. ARM 17.8.755 Inspection of Permit. This rule requires that air quality permits shall be made available for inspection by the Department at the location of the source.
9. ARM 17.8.756 Compliance with Other Requirements. This rule states that nothing in the permit shall be construed as relieving HK of the responsibility for complying with any applicable federal or Montana statute, rule, or standard, except as specifically provided in ARM 17.8.740, *et seq.*
10. ARM 17.8.759 Review of Permit Applications. This rule describes the Department's responsibilities for processing permit applications and making permit decisions on those permit applications that do not require the preparation of an environmental impact statement.
11. ARM 17.8.762 Duration of Permit. An MAQP shall be valid until revoked or modified, as provided in this subchapter, except that a permit issued prior to construction of a new or modified source may contain a condition providing that the permit will expire unless construction is commenced within the time specified in the permit, which in no event may be less than 1 year after the permit is issued.
12. ARM 17.8.763 Revocation of Permit. An MAQP may be revoked upon written request of the permittee, or for violations of any requirement of the Clean Air Act of Montana, rules adopted under the Clean Air Act of Montana, the FCAA, rules adopted under the FCAA, or any applicable requirement contained in the Montana State Implementation Plan (SIP).
13. ARM 17.8.764 Administrative Amendment to Permit. An MAQP may be amended for changes in any applicable rules and standards adopted by the Board of Environmental Review (Board) or changed conditions of operation at a source or stack that do not result in an increase of emissions as a result of those changed

conditions. The owner or operator of a facility may not increase the facility's emissions beyond permit limits unless the increase meets the criteria in ARM 17.8.745 for a de minimis change not requiring a permit, or unless the owner or operator applies for and receives another permit in accordance with ARM 17.8.748, ARM 17.8.749, ARM 17.8.752, ARM 17.8.755, and ARM 17.8.756, and with all applicable requirements in ARM Title 17, Chapter 8, Subchapters 8, 9, and 10.

14. ARM 17.8.765 Transfer of Permit. (1) This rule states that an MAQP may be transferred from one location to another if the Department receives a complete notice of intent to transfer location, the facility will operate in the new location for less than 1 year, the facility will comply with the FCAA and the Clean Air Act of Montana, and the facility complies with other applicable rules. (2) This rule states that an MAQP may be transferred from one person to another if written notice of intent to transfer, including the names of the transferor and the transferee, is sent to the Department.

F. ARM 17.8, Subchapter 8 - Prevention of Significant Deterioration of Air Quality, including, but not limited to:

1. ARM 17.8.801 Definitions. This rule is a list of applicable definitions used in this subchapter.
2. ARM 17.8.818 Review of Major Stationary Sources and Major Modifications-- Source Applicability and Exemptions. The requirements contained in ARM 17.8.819 through ARM 17.8.827 shall apply to any major stationary source and any major modification with respect to each pollutant subject to regulation under the FCAA that it would emit, except as this subchapter would otherwise allow.

This facility is not a major stationary source because it is not a listed source and the facility's PTE is less than 250 tons per year of any pollutant (excluding fugitive emissions).

G. ARM 17.8, Subchapter 12 - Operating Permit Program Applicability, including, but not limited to:

1. ARM 17.8.1201 Definitions. (23) Major Source under Section 7412 of the FCAA is defined as any stationary source having:
  - a. PTE > 100 tons/year of any pollutant;
  - b. PTE > 10 tons/year of any one hazardous air pollutant (HAP), PTE > 25 tons/year of a combination of all HAPs, or lesser quantity as the Department may establish by rule; or
  - c. PTE > 70 tons/year of PM<sub>10</sub> in a serious PM<sub>10</sub> nonattainment area.
2. ARM 17.8.1204 Air Quality Operating Permit Program Applicability. (1) Title V of the FCAA Amendments of 1990 requires that all sources, as defined in ARM 17.8.1204 (1), obtain a Title V Operating Permit. In reviewing and issuing MAQP #3091-01 for HK, the following conclusions were made:
  - a. The facility's PTE is less than 100 tons/year for any pollutant.

- b. The facility's PTE is less than 10 tons/year for any one HAP and less than 25 tons/year of all HAPs.
- c. This source is not located in a serious PM<sub>10</sub> nonattainment area.
- d. This facility is potentially subject to area source provisions of a current National Emissions Standard for Hazardous Air Pollutants (NESHAP) (40 CFR 63, Subpart ZZZZ).
- e. This facility is subject to current NSPS standards (40 CFR 60, Subpart OOO and potentially Subpart IIII).
- f. This source is not a Title IV affected source or a solid waste combustion unit.
- g. This source is not an EPA designated Title V source.

HK requested federally-enforceable permit limitations to remain a minor source of emissions with respect to Title V. Based on these limitations, the Department determined that this facility is not subject to the Title V Operating Permit Program. However, in the event that the EPA makes minor sources that are subject to NSPS obtain a Title V Operating Permit; this source will be subject to the Title V Operating Permit Program.

- h. ARM 17.8.1204(3). The Department may exempt a source from the requirement to obtain an air quality operating permit by establishing federally enforceable limitations which limit that source's PTE.
  - i. In applying for an exemption under this section the owner or operator of the facility shall certify to the Department that the source's PTE does not require the source to obtain an air quality operating permit.
  - ii. Any source that obtains a federally enforceable limit on PTE shall annually certify that its actual emissions are less than those that would require the source to obtain an air quality operating permit.

- 3. ARM 17.8.1207 Certification of Truth, Accuracy, and Completeness. The compliance certification submittal by ARM 17.8.1204(3) shall contain certification by a responsible official of truth, accuracy, and completeness. This certification and any other certification required under this subchapter shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

### III. BACT Determination

A BACT determination is required for each new or modified source. HK shall install on the new or modified source the maximum air pollution control capability which is technically practicable and economically feasible, except that BACT shall be utilized. All visible emissions from the facility are limited to opacity as referenced in Sections II.A.1, II.A.2, and II.A.3 (ARM 17.8.752). In addition, all visible emissions from any other associated equipment are limited to 20% opacity. Also, HK must take reasonable precautions to limit the fugitive emissions of airborne particulate

matter on haul roads, access roads, parking areas, and general plant property. HK shall use water spray bars and/or chemical dust suppressant, as necessary to maintain compliance with the opacity and reasonable precaution limitations.

Based on the relatively low amount of particulate, PM<sub>10</sub>, NO<sub>x</sub>, CO, VOC and SO<sub>x</sub> emitted it is economically infeasible to require pollution controls on the diesel generators. The control options selected have controls and control costs similar to other recently permitted similar sources and are capable of achieving the appropriate emission standards.

#### IV. Emission Inventory

Emission Source	Emissions Tons/Year [PTE]						
	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	CO	NO <sub>x</sub>	SO <sub>x</sub>	VOC
Impact Crushers (Total of Four)	8.41	3.78	0.70				
Truck Unloading (Assume all material is unloaded that can be processed in crushers)	0.00	0.11					
Screens (Independent and Integral crusher screens)	30.84	10.37	0.70				
Transfer Points (Assume 5 Transfer Points)	0.98	0.32	0.09				
Pile Formation (Assumes each independent screen forms a Pile)	22.66	10.72	1.62				
Truck Loading (Assume all material is eventually loaded)	0.98	0.32					
Diesel Generators (Total 2240 hp)	4.93	4.93	4.93	14.96	69.42	4.59	5.62
Diesel Generator (Total 570 hp)	0.02	0.02	0.02	3.25	2.51	1.17	1.43
Unpaved Roadways (Haul Roads)	5.39	1.49	0.15				
<b>TOTAL EMISSIONS &gt;</b>	<b>74.21</b>	<b>32.06</b>	<b>8.21</b>	<b>18.21</b>	<b>71.93</b>	<b>5.76</b>	<b>7.05</b>

#### HK Contractors, Inc. Emission Inventory Calculation Details

##### Crusher Total Capacity with Integral Enclosed Screens

##### Crusher Capacity

Process Rate: 1600 ton/hr  
 Operating Hours 8760 hours/year

##### PM Emissions:

Emission Factor 0.0012 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Calculations (0.0012 lbs/ton) \* (1,600.00 ton/hour) = 1.92 lbs/hr  
 (1.92 lbs/hr) \* (8760 hrs/yr) \* (0.0005 tons/lb) = 8.41 TPY

##### PM<sub>10</sub> Emissions:

Emission Factor 0.00054 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Calculations (0.00054 lbs/ton) \* (1,600.00 ton/hour) = 0.86 lbs/hr  
 (0.86 lbs/hr) \* (8760 hrs/yr) \* (0.0005 tons/lb) = 3.78 TPY

##### PM<sub>2.5</sub> Emissions:

Emission 0.0001 lbs/ton [AP-42 Table 11.19.2-2 8/04]  
 Factor  
 Calculations  $(0.0001 \text{ lbs/ton}) * (1,600.00 \text{ ton/hour}) = 0.16 \text{ lbs/hr}$   
 $(0.16 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 0.70 \text{ TPY}$

**Truck Unloading (Assume all material is unloaded that can be processed in crushers)**

Process Rate: 1600.0 ton/hr (Assumes each crusher operates independently)  
 Operating 8760 hours/year  
 Hours

PM<sub>10</sub>  
 Emissions:

Emission 0.000016 lbs/ton [AP-42 Table 11.19.2-2 8/04]  
 Factor  
 Calculations  $(0.000016 \text{ lbs/ton}) * (1,600.00 \text{ ton/hour}) = 0.03 \text{ lbs/hr}$   
 $(0.03 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 0.11 \text{ TPY}$

**Screening (Total of independent and screens integral to crushers)**

Process Rate: 3200 ton/hr  
 Operating 8760 hours/year  
 Hours

PM (Screening controlled)  
 Emissions:

Emission 0.00220 lbs/ton [AP-42 Table 11.19.2-2 8/04]  
 Factor  
 Calculations  $(0.0022 \text{ lbs/ton}) * (3,200.00 \text{ ton/hour}) = 7.04 \text{ lbs/hr}$   
 $(7.04 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 30.84 \text{ TPY}$

PM<sub>10</sub>  
 Emissions:

Emission 0.00074 lbs/ton [AP-42 Table 11.19.2-2 8/04]  
 Factor  
 Calculations  $(0.00074 \text{ lbs/ton}) * (3,200.00 \text{ ton/hour}) = 2.37 \text{ lbs/hr}$   
 $(2.37 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 10.37 \text{ TPY}$

PM<sub>2.5</sub>  
 Emissions:

Emission 0.00005 lbs/ton [AP-42 Table 11.19.2-2 8/04]  
 Factor  
 Calculations  $(0.00005 \text{ lbs/ton}) * (3,200.00 \text{ ton/hour}) = 0.16 \text{ lbs/hr}$   
 $(0.16 \text{ lbs/hr}) * (8760 \text{ hrs/yr}) * (0.0005 \text{ tons/lb}) = 0.70 \text{ TPY}$

**Transfer Points (Assume 5 Transfer Point that are Controlled)**

Process Rate: 1600 ton/hr (Assumes each crusher and screen have one transfer point combined)  
 Operating 8760 hours/year  
 Hours

PM (Conveyor Transfer Points)  
 Emissions:

Emission Factor 0.00014 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Calculations (0.00014 lbs/ton) \* (1,600.00 ton/hour) = 0.22 lbs/hr  
 (0.22 lbs/hr) \* (8760 hrs/yr) \*(0.0005 tons/lb) = 0.98 TPY

PM<sub>10</sub> Emissions:

Emission Factor 0.000046 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Calculations (0.000046 lbs/ton) \* (1,600.00 ton/hour) = 0.07 lbs/hr  
 (0.07 lbs/hr) \* (8760 hrs/yr) \*(0.0005 tons/lb) = 0.32 TPY

PM<sub>2.5</sub> Emissions:

Emission Factor 0.000013 lbs/ton [AP-42 Table 11.19.2-2 8/04]

Calculations (0.000013 lbs/ton) \* (1,600.00 ton/hour) = 0.02 lbs/hr  
 (0.02 lbs/hr) \* (8760 hrs/yr) \*(0.0005 tons/lb) = 0.09 TPY

**Pile Formation (Assume equipment thru-put is crusher total capacity)**

Process Rate: 1600 ton/hr Equation 1 from AP-42 Sec 13.2.4.3 11/06

Operating Hours 8760 hrs/year U = wind speed miles per hour 8.15 (Typical Value)  
 k = particle size multiplier 0.74 AP-42 Sec 13.2.4-3 11/06  
 M = Moisture content % 2.52 (Typical Value)

PM Emissions:

Emission Factor 0.00323375 lbs/ton  $E=k*(0.0032)*(U/5)^{1.3}/(M/2)^{1.4}$

Calculations (0.00323 lbs/ton) \* (1,600.00 ton/hour) = 5.17 lbs/hr  
 (5.17 lbs/hr) \* (8760 hrs/yr) \*(0.0005 tons/lb) = 22.66 TPY

PM<sub>10</sub> Emissions:

Equation 1 from AP-42 Sec 13.2.4.3 11/06  
 U = wind speed miles per hour 8.15 8.15 (Typical Value)  
 k = particle size multiplier 0.35 0.35 AP-42 Sec 13.2.4-3 11/06  
 M = Moisture content % 2.52 2.52 (Typical Value)

Emission Factor 0.00152948 lbs/ton  $E=k*(0.0032)*(U/5)^{1.3}/(M/2)^{1.4}$

Calculations (0.00153 lbs/ton) \* (1,600.00 ton/hour) = 2.45 lbs/hr  
 (2.45 lbs/hr) \* (8760 hrs/yr) \*(0.0005 tons/lb) = 10.72 TPY

PM <sub>2.5</sub>			Equation 1 from AP-42 Sec 13.2.4.3		
Emissions:			11/06		
			U = wind speed miles per hour	8.15	8.15 (Typical Value)
			k = particle size multiplier	0.053	0.35 AP-42 Sec 13.2.4-3 11/06
			M = Moisture content %	2.52	2.52 (Typical Value)
Emission Factor	0.00023161 lbs/ton		E=k*(0.0032)*(U/5)^1.3/(M/2)^1.4		
Calculations	(0.00023 lbs/ton) * (1,600.00 ton/hour) =			0.37 lbs/hr	
	(0.37 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =			1.62 TPY	

**Truck Loading (Assume all material is eventually loaded)**

Modeled as Truck Loading Conveyor

Process Rate: 1600 ton/hr  
 Operating Hours: 8760 hours/year

PM Emissions:

Emission Factor	0.00014 lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.00014 lbs/ton) * (1,600.00 ton/hour) =		0.22 lbs/hr	
	(0.22 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =		0.98 TPY	

PM<sub>10</sub> Emissions:

Emission Factor	0.000046 lbs/ton	[AP-42 Table 11.19.2-2 8/04]		
Calculations	(0.000046 lbs/ton) * (1,600.00 ton/hour) =		0.07 lbs/hr	
	(0.07 lbs/hr) * (8760 hrs/yr) *(0.0005 tons/lb) =		0.32 TPY	

**Diesel Generators (Total 2240 hp)**

(Two lowest rated engines for emission purposes)

Engine Rating: 2239.47 hp  
 Operating Hours: 2000 hrs/yr  
 Indicated they had 1600 kw and 70 kw - used hp ratings from application  
 1670 2239.47

**Particulate Emissions:**

PM Emissions:

Emission Factor	0.0022 lb/hp-hr	[AP-42 3.3-1, 10/96 ]	
Calculations	(0.0022 lb/hp-hr) * (2239.47 hp) =		4.93 lbs/hr
	(4.93 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		4.93 TPY

PM<sub>10</sub>  
Emissions:

Emission Factor	0.0022 lb/hp-hr	[AP-42 3.3-1, 6/06 ]	
Calculations	(0.0022 lb/hp-hr) * (2239.47 hp) =		4.93 lbs/hr
	(4.93 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		4.93 TPY

PM<sub>2.5</sub>  
Emissions:

Emission Factor	0.0022 lb/hp-hr	[AP-42 3.3-1, 10/96 ]	
Calculations	(0.0022 lb/hp-hr) * (2239.47 hp) =		4.93 lbs/hr
	(4.93 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		4.93 TPY

**CO**  
Emissions:

Emission Factor	0.00668 lb/hp-hr	[AP-42 3.3-1, 6/06 ]	
Calculations	(0.00668 lb/hp-hr) * (2239.47 hp) =		14.96 lbs/hr
	(14.96 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		14.96 TPY

**NOx**  
Emissions:

Emission Factor	0.031 lb/hp-hr	[AP-42 3.3-1, 6/06 ]	
Calculations	(0.031 lb/hp-hr) * (2239.47 hp) =		69.42 lbs/hr
	(69.42 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		69.42 TPY

**SOx**  
Emissions:

Emission Factor	0.00205 lb/hp-hr	[AP-42 3.3-1, 6/06 ]	
Calculations	(0.0021 lb/hp-hr) * (2239.47 hp) =		4.59 lbs/hr
	(4.59 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		4.59 TPY

**VOC**  
Emissions:

Emission Factor	0.00251 lb/hp-hr	[AP-42 3.3-1, 6/06 ]	
Calculations	(0.0025 lb/hp-hr) * (2239.47 hp) =		5.62 lbs/hr
	(5.62 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		5.62 TPY

**Diesel Generator (Total 570 hp)**

Engine Rating: 569.925 hp Indicated they had 425 kw used hp rating from application  
 Operating Hours: 2000 hrs/yr

**Particulate Emissions:**

PM Emissions:

Emission Factor 0.000033 lb/hp-hr tier 4 interim [AP-42 3.3-1, 10/96 ]  
 Calculations (0.000033 lb/hp-hr) \* (2239.47 hp) = 0.02 lbs/hr  
 (0.02 lbs/hr) \* (2000 hrs/yr) \* (0.0005 tons/lb) = 0.02 TPY

PM<sub>10</sub> Emissions:

Emission Factor 0.000033 lb/hp-hr tier 4 interim [AP-42 3.3-1, 6/06 ]  
 Calculations (0.000033 lb/hp-hr) \* (2239.47 hp) = 0.02 lbs/hr  
 (0.02 lbs/hr) \* (2000 hrs/yr) \* (0.0005 tons/lb) = 0.02 TPY

PM<sub>2.5</sub> Emissions:

Emission Factor 0.000033 lb/hp-hr tier 4 interim [AP-42 3.3-1, 10/96 ]  
 Calculations (0.000033 lb/hp-hr) \* (2239.47 hp) = 0.02 lbs/hr  
 (0.02 lbs/hr) \* (2000 hrs/yr) \* (0.0005 tons/lb) = 0.02 TPY

**CO Emissions:**

Emission Factor 0.00570 lb/hp-hr tier 4 interim [AP-42 3.3-1, 6/06 ]  
 Calculations (0.0057 lb/hp-hr) \* (2239.47 hp) = 3.25 lbs/hr  
 (3.25 lbs/hr) \* (2000 hrs/yr) \* (0.0005 tons/lb) = 3.25 TPY

**NOx Emissions:**

Emission Factor 0.004 lb/hp-hr tier 4 interim [AP-42 3.3-1, 6/06 ]  
 Calculations (0.0044 lb/hp-hr) \* (2239.47 hp) = 2.51 lbs/hr  
 (2.51 lbs/hr) \* (2000 hrs/yr) \* (0.0005 tons/lb) = 2.51 TPY

**SOx Emissions:**

Emission Factor 0.00205 lb/hp-hr [AP-42 3.3-1, 6/06 ]  
 Calculations (0.0021 lb/hp-hr) \* (2239.47 hp) = 1.17 lbs/hr  
 (1.17 lbs/hr) \* (2000 hrs/yr) \* (0.0005 tons/lb) = 1.17 TPY

**VOC**

**Emissions:**

Emission Factor	0.00251 lb/hp-hr	[AP-42 3.3-1, 6/06 ]	
Calculations	(0.0025 lb/hp-hr) * (2239.47 hp) =		1.43 lbs/hr
	(1.43 lbs/hr) * (2000 hrs/yr) * (0.0005 tons/lb) =		1.43 TPY

V. Existing Air Quality

The surrounding area is considered attainment/unclassified for the National Ambient Air Quality Standards (NAAQS).

VI. Ambient Air Impact Analysis

This permit is for a portable crushing and screening facility. Permit 3091-01 will cover the operation at any location within the State of Montana, excluding those counties that have a Department approved permitting program. In the view of the Department, the amount of controlled emissions generated by this facility will not exceed any set ambient standard. . In addition, this source is portable and any air quality impacts will be short-lived.

VII. Taking or Damaging Implication Analysis

As required by 2-10-105, MCA, the Department conducted the following private property taking and damaging assessment.

YES	NO	
X		1. Does the action pertain to land or water management or environmental regulation affecting private real property or water rights?
	X	2. Does the action result in either a permanent or indefinite physical occupation of private property?
	X	3. Does the action deny a fundamental attribute of ownership? (ex.: right to exclude others, disposal of property)
	X	4. Does the action deprive the owner of all economically viable uses of the property?
	X	5. Does the action require a property owner to dedicate a portion of property or to grant an easement? [If no, go to (6)].
		5a. Is there a reasonable, specific connection between the government requirement and legitimate state interests?
		5b. Is the government requirement roughly proportional to the impact of the proposed use of the property?
	X	6. Does the action have a severe impact on the value of the property? (consider economic impact, investment-backed expectations, character of government action)
	X	7. Does the action damage the property by causing some physical disturbance with respect to the property in excess of that sustained by the public generally?
	X	7a. Is the impact of government action direct, peculiar, and significant?
	X	7b. Has government action resulted in the property becoming practically inaccessible, waterlogged or flooded?
	X	7c. Has government action lowered property values by more than 30% and necessitated the physical taking of adjacent property or property across a public way from the property in question?
	X	Takings or damaging implications? (Taking or damaging implications exist if YES is checked in response to question 1 and also to any one or more of the following questions: 2, 3, 4, 6, 7a, 7b, 7c; or if NO is checked in response to questions 5a or 5b; the shaded areas)

Based on this analysis, the Department determined there are no taking or damaging implications associated with this permit action.

VIII. Environmental Assessment

An environmental assessment, required by the Montana Environmental Policy Act, was completed for this project. A copy is attached.

Analysis Prepared By: Craig Henrikson

Date: July 7, 2012

**DEPARTMENT OF ENVIRONMENTAL QUALITY**  
**Permitting and Compliance Division**  
**Air Resources Management Bureau**  
**P.O. Box 200901, Helena, MT 59620**  
**(406) 444-3490**

**FINAL ENVIRONMENTAL ASSESSMENT (EA)**

**Issued To:**        ***HK Contractors, Inc.***  
                      ***PO Box 51450***  
                      ***Idaho Falls, ID 83405***

**Air Quality Permit Number: 3091-01**

**Preliminary Determination Issued: 07/31/2012**

**Department Decision Issued: 08/31/2012**

**Permit Final: 09/18/2012**

1. *Legal Description of Site:* HK submitted an application to operate a portable crushing and screening operation powered by a number of diesel-powered generators. Permit #3091-01 would apply while operating at any location in Montana, except within those areas having a Department-approved permitting program, those areas considered to be tribal lands, or those areas in or within 10 km of certain PM<sub>10</sub> nonattainment areas. An addendum to this air quality permit would be required if HK intends to locate in or within 10 km of certain PM<sub>10</sub> nonattainment areas. *A Missoula County air quality permit would be required for locations within Missoula County, Montana.*
2. *Description of Project:* The permit application is for the operation of a portable crushing and screening operation with total engine horsepower up to 2810 hp provided by up to three different generators. The diesel powered generators would be used to provide power to HK equipment (i.e. screens, crushers, conveyors, etc.).
3. *Objectives of Project:* The diesel-powered generators would be used to provide power to HK equipment (i.e. screens, crushers, etc.), with all equipment under this permit modification treated as de minimis.
4. *Alternatives Considered:* In addition to the proposed action, the Department considered the "no-action" alternative. The "no-action" alternative would deny issuance of the MAQP to the proposed facility. However, the Department does not consider the "no-action" alternative to be appropriate because permitting HK's equipment in a de minimis fashion should facilitate compliance with all applicable rules and regulations as required for permit issuance. Therefore, the "no-action" alternative was eliminated from further consideration.
5. *A Listing of Mitigation, Stipulations, and Other Controls:* A listing of the enforceable permit conditions and a permit analysis, including a Best Available Control Technology (BACT) analysis, is included in this permit action.
6. *Regulatory Effects on Private Property:* The Department considered alternatives to the conditions imposed in this permit as part of the permit development. The Department determined the permit conditions would be reasonably necessary to ensure compliance with applicable requirements and to demonstrate compliance with those requirements and would not unduly restrict private property rights.

7. The following table summarizes the potential physical and biological effects of the proposed project on the human environment. The “no action alternative” was discussed previously.

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Terrestrial and Aquatic Life and Habitats			X			Yes
B	Water Quality, Quantity, and Distribution			X			Yes
C	Geology and Soil Quality, Stability and Moisture			X			Yes
D	Vegetation Cover, Quantity, and Quality			X			Yes
E	Aesthetics			X			Yes
F	Air Quality			X			Yes
G	Unique Endangered, Fragile, or Limited Environmental Resources			X			Yes
H	Demands on Environmental Resource of Water, Air and Energy			X			Yes
I	Historical and Archaeological Sites			X			Yes
J	Cumulative and Secondary Impacts			X			Yes

**SUMMARY OF COMMENTS ON POTENTIAL PHYSICAL AND BIOLOGICAL EFFECTS:** The following comments have been prepared by the Department.

**A. Terrestrial and Aquatic Life and Habitats**

The operation of the portable crushing and screening facility would have only minor impacts upon the terrestrial and aquatic life and habitats in areas where the generator may operate. Although air pollutant deposition would occur in the areas where the equipment would operate, the size and temporary nature of the operation, dispersion characteristics of pollutants, and conditions placed in Permit #3091-01 would result in minor impacts. Therefore, the operation of the equipment would present only minor impacts to the terrestrial and aquatic life and habitats in areas of potential operation.

**B. Water Quality, Quantity, and Distribution**

Although there would be an increase in air emissions in the area where the portable crushing and screening facility would operate, there would only be minor impacts on water quality, quantity, and distribution because of the temporary nature, size, operational requirements, and conditions placed in Permit #3091-01 for the facility. Further, as described in Section 7.F. of this EA, the Department determined that any impacts from deposition of pollutants would be minor. In addition, any accidental spills or leaks from equipment would be required to be handled according to the appropriate environmental regulations in an effort to minimize any potential adverse impact on the immediate and surrounding area. Overall, the operation of the equipment would have minor impacts to water quality, quantity, and distribution in the area of operations.

**C. Geology and Soil Quality, Stability, and Moisture**

As a result of the operation of the portable crushing and screening facility, there would be minor impacts to the geology and soil quality, stability, and moisture near the equipment's operational area because of the increased vehicle traffic and deposition of pollutants from

portable crushing and screening operation. As explained in Section 7.F. of this EA, the facility's size, operational requirements, temporary nature of the operation, and conditions placed in Permit #3091-01 would minimize the impacts from deposition. In addition, the equipment would be operating on a temporary basis for the duration of the projects, which would also reduce the potential impact to the local geology and soil quality, stability, and moisture.

D. Vegetation Cover, Quantity, and Quality

The operation of the crushing and screening equipment would result in minor impacts to the vegetative cover, quantity, and quality, because small amounts of vegetation would likely be disturbed as a result of operating the portable crushing and screening facility. In addition, pollutant deposition would occur on the surrounding vegetation. However, as explained in Section 7.F. of this EA, the Department determined that, due to the temporary nature of the operation, conditions placed in Permit #3091-01, and dispersion characteristics of the emissions, any impacts from deposition would be minor. In addition, because the water usage would be minor (as described in Section 7.B. of this EA) and the associated soil disturbance would be minor (as described in Section 7.C. of this EA), corresponding vegetative impacts from water and soil disturbance would also be minor.

E. Aesthetics

The portable crushing and screening facility would be visible and would create noise in the areas where it would operate. Permit #3091-01 would include conditions to control emissions (including visible emissions) from the crushing and screening equipment and the surrounding work area. The generators would be moderately sized by industrial standards and temporary and would be used to power permitted portable equipment operated by HK. Therefore, any aesthetic impact to a given area would be minor and temporary.

F. Air Quality

Air quality impacts from the operation of the portable crushing and screening facility would be minor because emissions from the portable crushing and screening facility would be relatively small. Dispersion and deposition of pollutants would occur from the operation of the portable crushing and screening facility; however, the Department determined that any air quality impacts from the pollutants would be minor due to dispersion characteristics (from factors such as wind speed and wind direction) and conditions placed in Permit #3091-01.

Permit #3091-01 would include conditions limiting opacity from the portable crushing and screening facility and would require that reasonable precautions be taken to control emissions from haul roads, access roads, parking lots, or the general work area. In addition, the permit would also limit total emissions from the portable crushing and screening facility and any additional equipment operated at the same site to 250 tons per year or less. Further, because the portable crushing and screening facility is limited in hours of operation to keep the potential emissions to less than 100 tons per year for any pollutant generated, the Department determined that the portable crushing and screening facility is a minor source of emissions as defined under Title V.

G. Unique Endangered, Fragile, or Limited Environmental Resources

Normally in an effort to identify species of special concern that may be present in the proposed areas of operation, the Department contacts the Montana Natural Heritage Program (MNHP) for a review of species of special concern. However, for this permit action, no initial location

is known as HK is currently not operating within the State of Montana. Issuance of this permit would increase emissions to the atmosphere near any location proposed for the operation of the portable crushing and screening facility. However, as explained in Section 7.F. of this EA, because of the temporary nature of the portable crushing and screening facility, and likely operating in previously disturbed areas, and conditions placed in Permit #3091-01, any impacts to unique endangered, fragile, or limited environmental resources from the deposition of pollutants would be minor.

H. Demands on Environmental Resource of Water, Air, and Energy

Water would be used on particulate emissions at equipment transfer points, haul roads, access roads, parking lots, or the general plant property, as necessary, to control dust resulting from indirect use of the portable crushing and screening facility. Also minor amounts of air would be used in portable crushing and screening facility operations and air quality would be impacted by pollutant emissions. The generators would consume energy from diesel fuel, a non-renewable resource. Generally, the operations are seasonal and would result in smaller demands on environmental resources. Therefore, any impacts on the demands of the environmental resources of water, air, and energy would be minor.

I. Historical and Archaeological Sites

According to past correspondence with the Montana State Historic Preservation Office (SHPO), there is low likelihood of disturbance to any known archaeological or historic site given that portable crushing and screening facilities typically set-up in industrial areas that often have been used previously. Therefore, it is unlikely that the project would affect any known historic or archaeological site and any impacts would be minor.

J. Cumulative and Secondary Impacts

The operation of the portable crushing and screening facility would cause minor effects to the physical and biological environment because other operations may potentially locate at the same site. However, any operations would have to apply for and receive the appropriate permits from the Department prior to operation. The permits would address the environmental impacts associated with the operations at the proposed sites.

The portable crushing and screening facility operations would be limited by Permit #3091-01 to total emissions of 250 tons/year or less from non-fugitive portable crushing and screening facility operations and any other additional equipment used at any given site.

8. *The following table summarizes the potential economic and social effects of the proposed project on the human environment. The “no-action” alternative was discussed previously.*

		Major	Moderate	Minor	None	Unknown	Comments Included
A	Social Structures and Mores			X			Yes
B	Cultural Uniqueness and Diversity			X			Yes
C	Local and State Tax Base and Tax Revenue			X			Yes
D	Agricultural or Industrial Production			X			Yes
E	Human Health			X			Yes
F	Access to and Quality of Recreational and Wilderness Activities			X			Yes
G	Quantity and Distribution of Employment			X			Yes
H	Distribution of Population				X		Yes
I	Demands for Government Services			X			Yes
J	Industrial and Commercial Activity			X			Yes
K	Locally Adopted Environmental Plans and Goals				X		Yes
L	Cumulative and Secondary Impacts			X			Yes

**SUMMARY OF COMMENTS ON POTENTIAL ECONOMIC AND SOCIAL EFFECTS:** The following comments have been prepared by the Department.

**A. Social Structures and Mores**

The operation of the portable crushing and screening facility would not likely alter or disrupt any local lifestyles or communities (social structures and mores) in the area of operation because equipment would operate intermittently, and only for the duration of specific projects. However, because the exact location of the next project site is unknown, the existing social structures and mores could be affected in a minor way as a result of this permitting action.

**B. Cultural Uniqueness and Diversity**

It would be unlikely that the operation of the portable crushing and screening equipment would have any impact on the cultural uniqueness and diversity because the equipment operations would be temporary and would likely take place in a previously disturbed industrial area. However, because the exact location of the next project site is unknown, the cultural uniqueness and diversity could be affected in a minor way as a result of this permitting action.

**C. Local and State Tax Base and Tax Revenue**

The proposed operation of the portable crushing and screening facility would have minor, if any affect on local and state tax base and tax revenue. The facility is a relatively small and temporary source; therefore, it would not remain at any individual site for any extended time period. No full time, permanent employees would likely be added as a result of issuing Permit #3091-01, and any revenue created by the operation of the portable crushing and screening facility would be widespread and for a relatively short time period.

D. Agricultural or Industrial Production

Under normal circumstances, the operation of the portable crushing and screening facility would take place in a previously disturbed industrial area. Therefore, the Department does not expect that the operation of the portable crushing and screening facility would affect or displace any agricultural land. Further, the portable crushing and screening facility operation is in one place only for the duration of each specific project and would have only a minor impact on any local industrial production.

E. Human Health

Permit #3091-01 would incorporate conditions to ensure that the portable crushing and screening facility would be operated in compliance with all applicable rules and standards. These rules and standards are designed to be protective of human health. As described in Section 7.F. of this EA, the Department determined that any impacts from deposition of pollutants would be minor due to dispersion characteristics and conditions placed in Permit #3091-01. The air emissions from this facility would be minimized by opacity limitations on the portable crushing and screening facility and the surrounding area of operation.

F. Access to and Quality of Recreational and Wilderness Activities

This plant likely would be located on previously disturbed property, or in a previously used industrial area and would not impact access to recreational and wilderness activities. However, minor impact on the quality of recreational activities is expected due to noise from crushers and screens and generators. Emissions from these generators would be minimized as a result of limitations placed in Permit #3091-01 and the temporary and portable nature of the operation.

G. Quantity and Distribution of Employment

Given the relatively small size and temporary nature of the operation, it is not expected that the activities from the operation of the portable crushing and screening facility would significantly affect the quantity and distribution of employment in any given area. Minor increases in an area's employment could result as a result of issuing Permit #3091-01.

H. Distribution of Population

Given the relatively small size and temporary nature of the operation, it is not expected that the activities from the portable crushing and screening facility would disrupt the normal population distribution of any given area. No secondary activities are expected to move to any area as a result of the current project.

I. Demands of Government Services

Government services would be required for acquiring the appropriate permits and ensuring compliance with the permits that are issued; however, the government services required would be minor.

J. Industrial and Commercial Activity

The operation of the portable crushing and screening facility would represent only a minor increase in the industrial activity in any given area. No additional industrial or commercial activity would result from the operation of the portable crushing and screening facility because no secondary activities are expected to move to any area as a result of the current project.

K. Locally Adopted Environmental Plans and Goals

The Department is unaware of any locally adopted environmental plans or goals at any given site that the portable crushing and screening facility may be operated at under Permit #3091-01. The conditions identified in Permit #3091-01 would apply to operation of the portable crushing and screening facility at the proposed sites.

L. Cumulative and Secondary Impacts

Overall, the cumulative and secondary social and economic impacts from this project would be minor because the portable crushing and screening facility would likely locate at previously disturbed areas. New businesses would not be drawn to the area and permanent jobs would not be created or lost due to the operation of the portable crushing and screening facility. Because no new employees would be hired due to the operation of the portable crushing and screening facility, there would be no economic impacts from new employees. In addition, any social and economic impacts that are created would be minor and short-lived because of the relatively small size and temporary nature of the operation.

Recommendation: No Environmental Impact Statement (EIS) is required.

*If an EIS is not required, explain why the EA is an appropriate level of analysis:* Because this portable crushing and screening facility is a temporary source and must use reasonable precautions to control emissions, any impacts created would be minor impacts.

Other groups or agencies contacted or which may have overlapping jurisdiction: *Montana Historical Society – State Historic Preservation Office, Natural Resource Information System – Montana Natural Heritage Program*

Individuals or groups contributing to this EA: *Department of Environmental Quality – Air Resources Management Bureau.*

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